

Hydrologic Forecast Tenmile Creek

CONDITIONS 06/01/2020

Lewis & Clark County Water Quality Protection District

SUMMARY

Tenmile Creek reached nearly 300 CFS on May 21st in response to precipitation throughout the region, and has been dropping steady since. June 1st flows are slightly above 100cfs. Snowpack at Frohner Meadows SNOTEL site is gone. The past week's high temperatures have accelerated snow-loss at higher elevations and Rocker Peak (8,000') SWE now stands at 40% of normal. With seasonal temperatures and no significant precipitation forecast over the next week, expect loss of higher elevation snowpack and uniformly dropping stream level on Tenmile Creek.

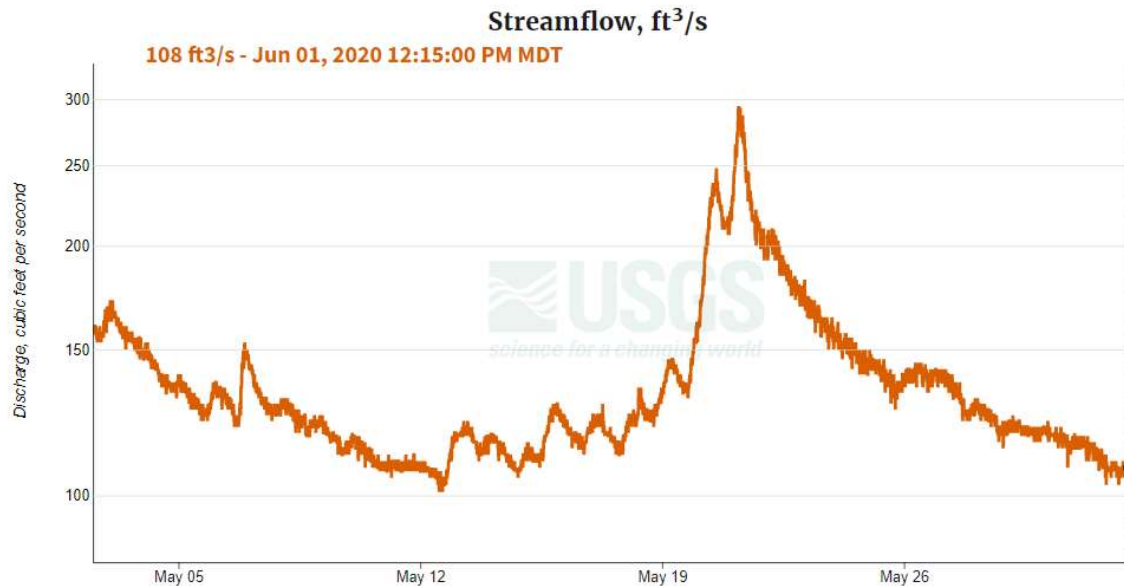
Residents should keep track of weather patterns for increasing temperature and precipitation events, particularly thunderstorms, which could change streamflows quickly, causing small creeks such as Tenmile Creek and Silver Creek to rise rapidly.

The following data and information are used to evaluate hydrologic conditions in the Tenmile Creek drainage.

1. **Streamflow** measured at Williams St USGS Stream Gauging Station west of the city of Helena.
<https://waterdata.usgs.gov/monitoring-location/06063000>
 2. **Snowpack** snow water equivalent (SWE) at the SNOTEL Stations Frohner Meadows, Rocker Peak, Nevada Ridge.
<https://www.nwrfc.noaa.gov/snow/snowplot.cgi?FRHM8>
<https://www.nwrfc.noaa.gov/snow/snowplot.cgi?RKPM8>
<https://www.nwrfc.noaa.gov/snow/snowplot.cgi?NVRM8>
 3. Short-term Helena 5-day weather (**precipitation and temperature**) projection from the National Weather Service.
<https://forecast.weather.gov/MapClick.php?lat=46.5924&lon=-112.0403#.XpoTqkZKjBQ>
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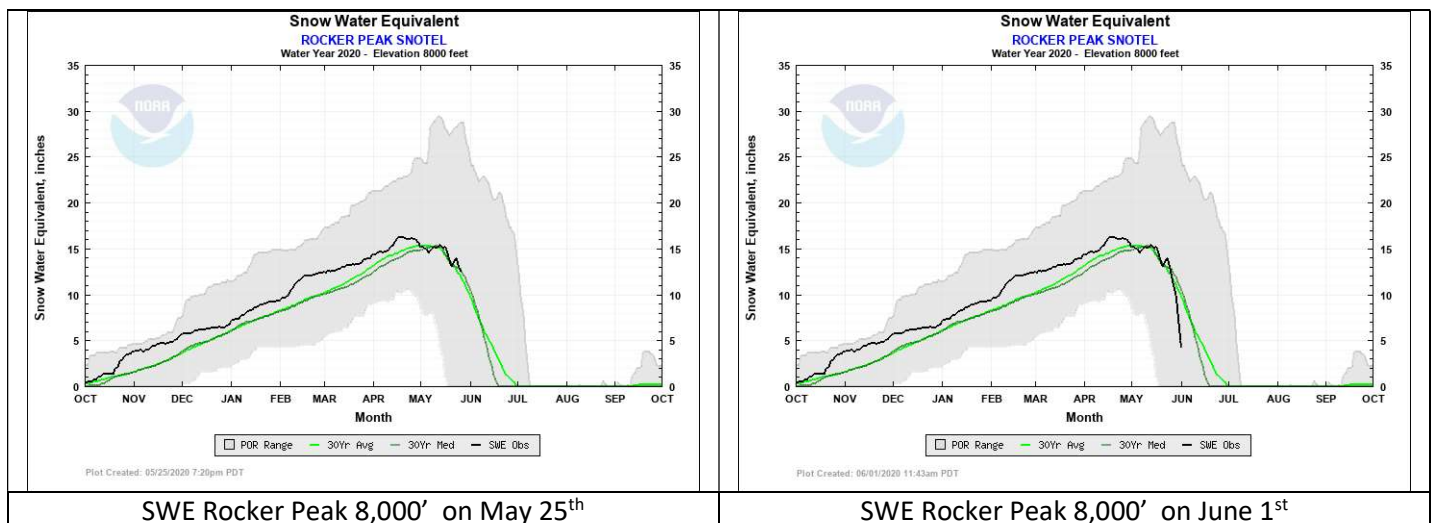
1. STREAMFLOW

Streamflow on Tenmile Creek over the past 30 days is shown below. Since the May 21st precipitation peak, Tenmile Creek has been dropping steadily. Flood discharge is estimated at >400 CFS.



2. SNOWPACK (SWE)

SWE at Frohner Meadows (6,000') is gone. The past week's high temperatures have accelerated snow-loss at higher elevations and Rocker Peak SWE now stands at 40% of normal. Charts below show loss of Rocker Peak snow in the past week.



3. WEATHER

Monday through next Friday... Seasonal temperatures in the upper 70's with some chance of showers is forecast through Friday. No significant precipitation is forecast.